IN THE CLAIMS

1. (Currently amended) A method for identifying destination nodes of a multicast session in a network having a plurality of nodes, comprising:

forming a circularly linked list further comprising a list of destination nodes, each destination node having an associated destination address for receiving multicast data and a link to a next destination node in the list for processing;

receiving data intended for transmittal to the identified destination nodes of the multicast session;

entering the list at an initial destination node, wherein the initial destination node is the destination node from which the data was received;

traversing the linked list to process each destination node, ~~for each destination node,~~ sending the multicast data to the associated destination address for each destination node other than the initial destination node, and using the link to determine the next destination node for processing; and

terminating the traversing step when all linked destination nodes have been processed;

such that the destination node from which the data was received is excluded from the multicast session.

2-4. (Canceled)

5. (Currently amended) The method of claim [[4]] 1 wherein the received data includes an indicator identifying the destination node that is to be excluded from the multicast session.

6. (Original) The method of claim 5 wherein the indicator identifies the destination node from which the data was received as the destination node to be excluded from the multicast session.

7. (Previously presented) The method of claim 1 wherein the initial destination node is predetermined.

8. (Previously presented) The method of claim 1 further comprising receiving data intended for transmittal to the identified destination nodes of the multicast session on an input port, and wherein the initial destination node is determined based on the input port.

9. (Canceled)

10. (Previously presented) The method of claim 1 wherein the traversed destination nodes are the identified destination nodes of the multicast session.

11. (Previously presented) The method of claim 1 wherein destination nodes for a plurality of multicast sessions are interleaved in the list, and wherein the destination nodes for each one of the plurality of multicast sessions are circularly linked.

12. (Canceled)

13. (Previously presented) The method of claim 11 wherein the link comprises a pointer at each destination node that points to another destination node such that the plurality of destination nodes are circularly linked.

14. (Currently amended) A method for identifying the destination nodes for a multicast session in a network having a plurality of nodes, comprising:

forming a multicast group list comprising a queue further comprising a circularly linked list of destination nodes, wherein each destination node includes link information and an associated destination node address for receiving multicast data;

receiving data intended for transmittal to the destination nodes of the multicast session;

entering the list at an initial destination node as determined from the received data, wherein the initial destination node is the destination node from which the data was received;

traversing the list according to the link information of each destination node in the list and sending the multicast data to the associated destination node address for each destination node in the list other than the initial destination node;

determining when the traversing step returns to the initial destination node entry; and

terminating the traversing step in response to the step of determining;

such that the destination node from which the data was received is excluded from the multicast session.

15. (Currently amended) An apparatus for identifying destination nodes of a multicast session in a network having a plurality of nodes, comprising:

a circularly linked list ~~further~~ comprising a list of destination nodes, wherein the contents of each destination node includes an associated destination node address, list linking information and data transmission parameters;

a processing engine for receiving data intended for transmittal to the destination nodes of the multicast session, identifying the destination node from which the data was received as an initial destination node for entering the list and for traversing the linked list according to the list linking information until the initial destination node entry is reached, at each destination node other than the initial destination node the processing engine sending the multicast session data to the associated destination node address according to the data transmission parameters; and

the processing engine terminating the traversing process;

such that the destination node from which the data was received is excluded from the multicast session.

16. (New) The method of claim 14 wherein the received data includes an indicator identifying the destination node that is to be excluded from the multicast session.

17. (New) The method of claim 16 wherein the indicator identifies the destination node from which the data was received as the destination node to be excluded from the multicast session.

18. (New) The method of claim 14 wherein the initial destination node is predetermined.

19. (New) The method of claim 14 further comprising receiving data intended for transmittal to the identified destination nodes of the multicast session on an input port, and wherein the initial destination node is determined based on the input port.

20. (New) The method of claim 14 wherein the traversed destination nodes are the identified destination nodes of the multicast session.

21. (New) The method of claim 14 wherein destination nodes for a plurality of multicast sessions are interleaved in the list, and wherein the destination nodes for each one of the plurality of multicast sessions are circularly linked.

22. (New) The method of claim 21 wherein the link comprises a pointer at each destination node that points to another destination node such that the plurality of destination nodes are circularly linked.

23. (New) The apparatus of claim 15 further comprising receiving data intended for transmittal to the identified destination nodes of the multicast session on an input port, and wherein the initial destination node is determined based on the input port.

24. (New) The apparatus of claim 15 wherein destination nodes for a plurality of multicast sessions are interleaved in the list, and wherein the destination nodes for each one of the plurality of multicast sessions are circularly linked.

25. (New) The apparatus of claim 24 wherein the link comprises a pointer at each destination node that points to another destination node such that the plurality of destination nodes are circularly linked.